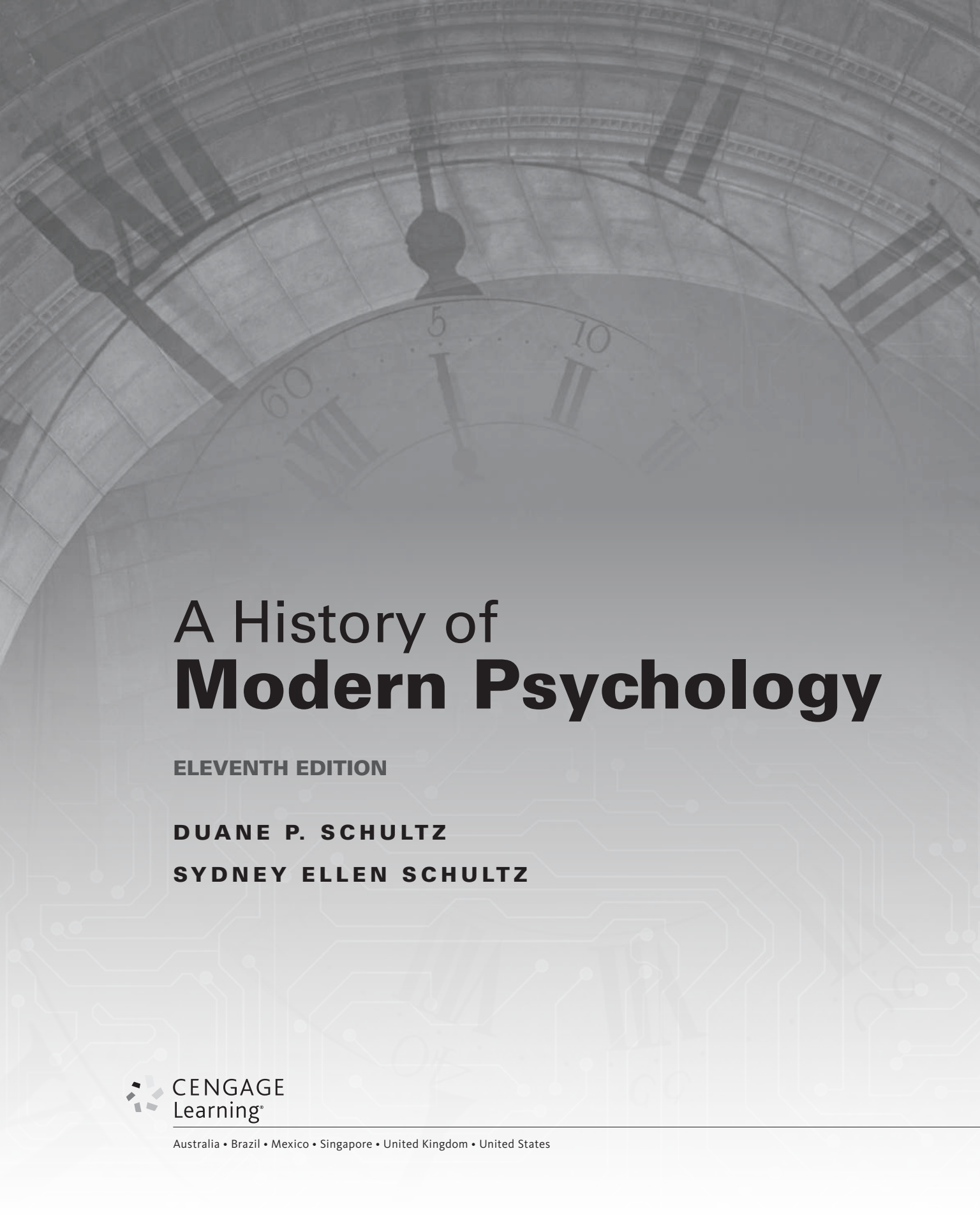


DUANE P. SCHULTZ ■ SYDNEY ELLEN SCHULTZ

A HISTORY OF

MODERN
PSYCHOLOGY

ELEVENTH EDITION

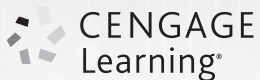


A History of **Modern Psychology**

ELEVENTH EDITION

DUANE P. SCHULTZ

SYDNEY ELLEN SCHULTZ



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Preface

The focus of this book is the history of modern psychology, the period beginning in the late nineteenth century, when psychology became a separate and independent discipline. Although we briefly review earlier philosophical thought, we concentrate on issues directly related to the establishment of psychology as a new and distinct field of study. Our purpose is to present a history of *modern* psychology, not the centuries of philosophical work that preceded it.

We recount the history of psychology in terms of people, ideas, and schools of thought, as well as the spirit of the times that influenced their development. Since the formal beginning of the field in 1879, psychology's methods and subject matter have changed as each new idea captured the loyalty of adherents and dominated the field for a time. Our interest, then, is in the developing sequence of approaches that have defined psychology over the years.

Each school of thought is discussed as a movement arising within a historical and social context. Contextual forces include the intellectual spirit of the times (the *Zeitgeist*), as well as social, political, and economic factors such as the effects of war, prejudice, and discrimination.

Although the chapters are organized in terms of the schools of thought, we also recognize that these systems resulted from the work of individual scholars, researchers, organizers, and promoters. It is people, not abstract forces, who write articles, conduct research, present papers, popularize ideas, and teach the next generation of psychologists. We discuss the contributions of the pivotal men and women, noting that their work was often affected not only by the times in which they flourished but also by their own personal life experiences.

We describe each school of thought in terms of its connection to the scientific ideas and discoveries that preceded and followed it. Each school evolved from or revolted against the existing order and in its turn inspired viewpoints that challenged, opposed, and eventually replaced it. With the hindsight of history, then, we can trace the pattern and the continuity of the development of modern psychology. Here are a few examples of material new to this edition.

New to the Eleventh Edition

- *Winging it—how birds evolve to avoid cars*
- *Is it all in our heads?—the increasing role of brain science in psychology*
- *Why did the FBI raid the home of James McKeen Cattell?*
- *The latest in positive psychology—Seligman's flourish movement*
- *Multimedia classroom presentations in psychology—100 years ago*
- *The return of Freud's anal personality*
- *They only came out at night—psychology's role in training bat bombers in World War II*
- *The use of Coca-Cola as a popular “nerve tonic” for neurotics*

- Alexander Volta’s “shocking” research
- Ada Lovelace: Virgin “Bride of Science”
- Little Albert found at last?—the search for psychology’s most famous baby
- More on Freud’s promotion of cocaine, his personal life, and his escape from the Nazis
- Computers are interpreting dreams—really?
- Why was John B. Watson haunted by depression and suicidal thoughts?
- Can what you think affect someone else’s brain?
- Does it matter where you live?—happiness across cultures
- Why was Alan Turing arrested for gross indecency in England in 1952 and pardoned by the Queen in 2013?
- Freud’s 1,500 love letters—published at last
- Knee jerks and goldfish—what did they mean for psychology?
- How the media covered the new psychology in America 100 years ago
- Ethnic differences in how students perceive their psychology courses
- Asylum tourism—the so-called insane asylums built in the nineteenth century now attract tourists
- The enthusiastic embrace of psychology by the American public in the 1920s
- Is contemporary neuroscience a new form of phrenology?
- The relationship between seventeenth-century mechanical figures and today’s robots
- The roles of meaning and purpose in happiness
- The huge impact of World War II on the growth of American psychology

As we prepared the eleventh edition of this book many years after writing the first one, we were reminded anew of the dynamic nature of the history of psychology. It is not fixed or finished but is in a continual state of growth. An enormous amount of scholarly work is being produced, translated, and reevaluated. Information from nearly 180 sources has been added, some published as recently as 2014, and revisions have been made to material from the previous edition.

We have included information on Web sites that provide additional material on the people, theories, movements, and research discussed in this book. We explored hundreds of sites and chose the most informative, reliable, and current, as of the time of publication. The **In Their Own Words** sections provide original writings by key figures in the history of psychology, presenting in each theorist’s distinctive personal style—and the style of the times—a unique perspective on psychology’s methods, problems, and goals. These sections have been reevaluated and edited for clarity and comprehension.

At the beginning of each chapter we offer a teaser, a brief narrative built around a person or event designed to introduce a major theme. These sections immediately define the subject matter and tell the student that history is about real people and situations. These topics include, among others:

- *The mechanical duck that ate, digested, and defecated on a silver platter. All the rage in Paris in 1739, it was to become a metaphor for a new conception of the functioning of the human body as a machine.*
- *The campus clown and perception.*
- *Charles Darwin’s fascination with Jenny the Orangutan, who wore a frilly dress and drank tea from a cup.*
- *Why Wilhelm Wundt couldn’t multitask, and what that meant for the new psychology.*
- *The most famous horse in the history of psychology.*
- *The 1909 Tennessee drug bust against the deadly substance caffeine, and the psychologist who proved the government wrong.*
- *Why John B. Watson held the hammer while his pretty young graduate assistant held the baby.*

- *The IQ Zoo, Priscilla the Fastidious Pig, and Bird Brain, who beat B. F. Skinner at a game of tic-tac-toe.*
- *What Wolfgang Köhler was really doing on the most famous island in the history of psychology.*
- *Sigmund Freud's boyhood dream about his mother and what it really meant.*

New photographs, tables, and figures have been chosen for this edition. Chapters contain outlines, discussion questions, and annotated reading lists. Important terms are boldfaced in the text and defined in the margin glossary and at the back of the book. The following supplements are available for instructors:

Online PowerPoint Lecture Slides (978-1-305-67185-0)

Instructor Manual with Test Bank (978-1-305-67184-3)

Cognero (978-1-305-87617-0)

Website

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D.P.S., S.E.S.

The Study of the History of Psychology

Did You See the Clown? What about the Gorilla?

Why Study the History of Psychology?

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The Data of History: Reconstructing Psychology's Past: How Do We Know What Really Happened?

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Did You See the Clown? What about the Gorilla?

He looked just like a clown. He wore a bright purple and yellow outfit, red shoes, wild eye makeup, a white wig, a large red nose, and floppy blue shoes and he was riding a unicycle. We don't know about your campus, but we don't see too many clowns around ours. If we did, we probably would notice them. How could you miss seeing something as obvious and odd as a clown?

That was what Ira Hyman, a psychologist at Western Washington University in Bellingham, Washington, wanted to find out. He asked a student to dress up like a clown and ride around the main campus square where hundreds of people were walking to and from classes (Hyman, Boss, Wise, McKenzie, & Caggiano, 2009; Parker-Pope, 2009).

When students were asked if they noticed anything unusual, like a clown, only half of those who were walking by themselves said they did. More than 70 percent of those walking with another person saw the clown, but only 25 percent of those who were on their smartphones were aware of the clown. Now you might be thinking that this would be a huge disappointment to a clown who is trying to attract attention, but what does it have to do with the history of psychology? It's a good question. But before we get to the answer, let's take a look at a gorilla—or at least someone dressed like one.

It has come to be one of the most popular psychology studies of the twenty-first century. A group of students watched a short video of two teams of three people each, moving quickly round while passing a basketball to one another. One team was dressed in black shirts and the other wore white shirts. The job of the students was to count the number of times the team dressed in white shirts passed the ball to one another. (See the video at www.theinvisiblegorilla.com/videos.html.) A simple matter of counting right? All they had to do was to pay close attention.

About halfway through the less-than-one-minute video, a woman dressed from head to toe in a gorilla suit walked into the middle of the group, thumped her chest, and then walked away. Meanwhile, the players kept passing the ball around as if nothing had happened.

When the video ended, the subjects were asked if they saw anything unusual while they were counting. Half of them said no. They had not seen the gorilla! This phenomenon has been called “inattention blindness,” and it has been demonstrated countless times in a number of countries all around the world and with diverse groups of subjects.

For example, 83 percent of a group of radiologists did not see an image of a gorilla that had been inserted on the CT image they were examining (Drew, Vo, & Wolfe,

2013). Older subjects were less likely to see the gorilla than younger ones, and white subjects were less likely to see an African American walk into the basketball-passing scene than a white person (Graham & Burke, 2011; Brown-Iannuzzi, Hoffman, Payne, & Trawalter, 2013).

So, what does the clown and gorilla research have to do with the history of psychology? Studies clearly show that we have a hard time mentally focusing on more than one thing at a time, but it turns out that this is not a new finding. The same thing was first demonstrated over 150 years ago, in 1861, by a German psychologist who is usually credited with starting psychology as we know it today.

That experiment (see Chapter 4) also shows us that the study of the past is relevant for the present, but first we must become aware of what was done in the past. History has much to tell us about the world today, and early developments in psychology help us understand the nature of the field in the twenty-first century. That is one answer to the question you may be asking yourself: namely, “Why am I taking this course?”

Why Study the History of Psychology?

We just noted one reason for studying the history of psychology. Another has to do with the fact that this course is being offered at your school. It indicates that the faculty believes it is important for you to learn about the history of your field. Courses in the history of psychology have been taught since 1911, and many colleges require them for psychology majors.

A survey of 374 colleges found that 83 percent provided coursework in the history of psychology (Stoloff et al., 2010). Another survey of 311 psychology departments reported that 93 percent offered such courses (Chamberlin, 2010). Of all the sciences, psychology is unique in this regard. The majority of science departments do not offer studies in the history of their fields, nor does the faculty of those departments consider the history of their disciplines to be vital to their students’ development.

In determining how this academic interest in the history of the field helps you understand psychology today, consider what you already know from taking other psychology courses: namely, that there is no single form, approach, or definition of psychology on which all psychologists agree. You have learned that there is an enormous diversity, even divisiveness and fragmentation, in professional and scientific specialization and in subject matter.

Some psychologists focus on cognitive functions, others deal with unconscious forces, and still others work only with overt behavior or with physiological and biochemical processes. Modern psychology includes many subject areas that seem to have little in common beyond a broad interest in human nature and behavior and an approach that attempts in some general way to be scientific.

The only framework that binds these diverse areas and approaches and gives them a coherent context is their history, the evolution over time of psychology as an independent discipline. Only by exploring psychology’s origins and development can we understand the nature of psychology today. Knowledge of history brings order to disorder and imposes meaning on what may appear to be chaos, putting the past into perspective to explain the present. Exploring people, events, and experiences of the past help make clear the forces that have made psychology what it is today.

This book shows you that studying the history of psychology is the most systematic way to integrate the areas and issues of modern psychology. This course will enable you to recognize relationships among ideas, theories, and research efforts and to understand how pieces of the psychology puzzle come together to form a coherent picture.

We should add that the history of psychology is a fascinating story on its own, offering drama, tragedy, heroism, and revolution—and its share of sex, drugs, and some really weird

people. Despite false starts, mistakes, and misconceptions, you will see that overall there is a clear and continuing evolution that has shaped contemporary psychology and provides us with an explanation for its richness.

The Beginning of Modern Psychology

Here is another question. For our study of the history of psychology, where do we start? The answer depends on how we define *psychology*. Its origins can be traced to two different time periods, some 2,000 years apart. Thus, psychology is both one of the oldest of all scholarly disciplines and one of the newest.

First, we can trace ideas and speculations about human nature and behavior back to the fifth century BC, when Plato, Aristotle, and other Greek philosophers grappled with many of the same issues that concern psychologists today. These ideas include some of the basic topics you covered in your introductory psychology classes: memory, learning, motivation, thought, perception, and abnormal behavior. There seems to be little disagreement among historians of psychology that the “views of our forebears over the past 2,500 years set the framework within which practically all subsequent work has been done” (Mandler, 2007, p. 17). Thus, one possible starting point for a study of the history of psychology would take us all the way back to ancient philosophical writings about problems that later came to be included in the formal discipline we know as psychology.

Conversely, we could choose to view psychology as one of the newer fields of study and begin our coverage approximately 200 years ago, when modern psychology emerged from philosophy and other early scientific approaches to claim its own unique identity as a formal field of study.

How should we distinguish between modern psychology, which we cover in this book, and its roots, that is, the prior centuries of its intellectual forerunners? That distinction has less to do with the kinds of questions asked about human nature than with the methods used to try to answer those questions. It is the approach taken and the techniques employed that distinguish the older discipline of philosophy from modern psychology and that mark the emergence of psychology as a separate, primarily scientific, field of study.

Until the last quarter of the nineteenth century, philosophers studied human nature by speculating, intuiting, and generalizing based on their own experience. However, a major transformation occurred when philosophers began to apply the tools and methods already successful in the biological and physical sciences to explore questions about human nature. Only when researchers came to rely on carefully controlled observation and experimentation to study the human mind did psychology begin to attain an identity separate from its philosophical roots.

The new discipline of psychology needed precise and objective ways of dealing with its subject matter. Much of the history of psychology, after its separation from its roots in philosophy, is the story of the continuing development of tools, techniques, and methods to achieve this increased precision and objectivity, refining not only the questions psychologists asked but also the answers they obtained.

If we seek to understand the complex issues that define and divide psychology today, then a more appropriate starting point for the history of the field is the nineteenth century, the time when psychology became an independent discipline with distinctive methods of inquiry and theoretical rationales. Although it is true, as we noted, that philosophers such as Plato and Aristotle concerned themselves with problems that are still of general interest, they approached these problems in ways vastly different from those of today’s psychologists. Those scholars were not *psychologists* in the contemporary usage of the term.

A noted scholar of the history of psychology, Kurt Danziger, refers to the early philosophical approaches to questions of human nature as the “prehistory” of modern

psychology. He believes that the “history of psychology is limited to the period when psychology recognizably emerges as a disciplinary subject matter and that it is extremely problematical to talk about psychology as having a history before that” (Danziger, quoted in Brock, 2006, p. 12).

The idea that the methods of the physical and biological sciences could be applied to the study of mental phenomena was inherited from both philosophical thought and physiological investigations of the seventeenth to nineteenth centuries. That exciting era forms the immediate background out of which modern psychology emerged, and that is where we will begin. We shall see that while the nineteenth-century philosophers were clearing the way for an experimental attack on the functioning of the mind, physiologists were independently approaching some of the same problems from a different direction.

The nineteenth-century physiologists were making great strides toward understanding the bodily mechanisms underlying mental processes. Their methods of study differed from those of the philosophers, but the eventual union of these disparate disciplines—philosophy and physiology—produced a new field of study that quickly earned its own identity and stature.

Although the majority of psychologists agree that psychology is a science, surveys of the general population indicate that up to 70 percent of the general public remains skeptical of psychology’s scientific status (Lilienfeld, 2012). We hope that by the end of this course, you will see that much of the field of psychology today continues to advance through the use of increasingly rigorous scientific methodology.

The Data of History: Reconstructing Psychology’s Past: How Do We Know What Really Happened?

In this book, *A History of Modern Psychology*, we are dealing with two disciplines, history and psychology, using the methods of history to understand the development of psychology. Because our coverage of the evolution of psychology depends on the methods of history, let us introduce briefly the notion of **historiography**, which refers to the techniques and principles employed in historical research.

Historiography: The principles, methods, and philosophical issues of historical research.

Historians face several problems that psychologists do not share. The data of history—that is, the materials historians use to reconstruct lives, events, and eras—differ markedly from the data of science. The most distinctive feature of scientific data is the way they are gathered. For example, if psychologists want to investigate the circumstances under which people act to help those in distress, or whether children imitate aggressive behavior they see on television or in video games, then they will construct situations or establish conditions from which data can be generated.

The psychologists may conduct a laboratory experiment, observe behavior under controlled real-world conditions, take a survey, or calculate the statistical correlation between two variables. In using these methods, scientists have a measure of control over the situations or events they choose to study. In turn, those events can be reconstructed or replicated by other scientists at other times and places. Thus, the data can be verified later by establishing conditions similar to those of the original study and repeating the observations.

In contrast, the data of history cannot be reconstructed or replicated. Each situation occurred at some time in the past, perhaps centuries ago, and historians might not have bothered to record the particulars of the event at the time or even to record the details accurately.

Today’s historians cannot control or reconstruct past events to examine them in light of present knowledge. If the historical incident itself has been lost to view, then how can

historians deal with it? What data can they use to describe it, and how can we possibly know for sure what happened?

Although historians cannot repeat a situation to generate pertinent data, they still have significant information to consider. The data of past events are available to us as fragments: descriptions written by participants or witnesses, letters and diaries, photographs and pieces of old laboratory equipment, interviews, and other official accounts. It is from these sources, that is, these data fragments, that historians try to recreate the events and experiences of the past.

This approach is similar to that of archaeologists who work with fragments of past civilizations—such as arrowheads, shards of clay pots, or human bones—and try to describe the characteristics of those civilizations. Some archaeological excavations yield more detailed data fragments than others, allowing for more accurate reconstructions. Similarly, with excavations in history, the data fragments may be so great as to leave little doubt about the accuracy of the account. In other instances, however, the data fragments may be lost, distorted, or otherwise compromised.

HISTORY ONLINE

www.CengageBrain.com

Check the publisher's Web site, www.CengageBrain.com, and enter SCHULTZ HISTORY to find companion materials for this text.

www3.uakron.edu/ahap/

The Archives of the History of American Psychology holds an outstanding collection of documents and artifacts, including the professional papers of prominent psychologists, laboratory equipment, posters, slides, and films.

www.apa.org/about/archives/index.aspx

This link to the historical archives of the APA will help you locate APA-relevant historical material held by the Library of Congress in Washington, DC, as well as oral histories, photos, biographies, and obituaries.

psychclassics.yorku.ca/[companion site: psychclassics.asu.edu/]

This amazing site is maintained by psychologist Christopher Green at York University in Toronto, Canada. It includes the complete text of books, book chapters, and articles of importance in the history of psychology. Google *York University History and Theory of Psychology Question & Answer Forum* to post questions about the history of psychology, answer questions that other people have submitted, or browse the site to find out what people are saying. Green offers a blog and a weekly podcast, *This Week in the History of Psychology*, at yorku.ca/christo/podcasts.

historyofpsychology.org/

The Web site for the Society for the History of Psychology (Division 26 of the American Psychological Association) offers student resources, online books and journals, and a retail shop selling posters, T-shirts, coffee mugs, baseball caps, and more featuring great men and women from psychology's past. See also their Facebook page:

www.facebook.com/pages/Society-for-the-History-of-Psychology/86715677509?ref=mf.

The APA YouTube site offers a variety of short videos geared to students and the general population, including quick summaries of research programs, tips on mental health topics such as how to choose a psychologist and recognizing the symptoms of depression, and humorous animated videos on psychotherapy (www.youtube.com/theapavideo).

History Lost and Found

In some cases, the historical record is incomplete because data have been lost, sometimes deliberately. Consider the case of John B. Watson (Chapter 10), the founder of the behaviorism school of thought. Before he died in 1958 at age 80, he systematically burned his letters, manuscripts, and research notes, destroying the entire unpublished record of his life and career. Those data are lost forever.

Sometimes data have been misplaced. In 2006, more than 500 handwritten pages were discovered in a household cupboard in England. They were determined to be the official minutes of Royal Society meetings for the years 1661 to 1682, recorded by Robert Hooke, one of the most brilliant scientists of his time. The papers revealed early work done with a new scientific tool, the microscope, and detailed the discovery of bacteria and spermatozoa. Also included was Hooke's correspondence with Isaac Newton about the subject of gravity and the movement of the planets (Gelder, 2006; Sample, 2006).

In 1984, the papers of Hermann Ebbinghaus (Chapter 4), who was prominent in the study of learning and memory, were found some 75 years after his death. In 1983, 10 large boxes were uncovered that contained the handwritten diaries of Gustav Fechner (Chapter 3), who developed psychophysics. These diaries covered the period from 1828 to 1879, a significant time in the early history of psychology, yet for more than 100 years psychologists were unaware of their existence. Many authors had written books about the work of Ebbinghaus and Fechner without having access to these important collections of personal papers.

Charles Darwin (Chapter 6) has been the subject of more than 200 biographies. Surely we can assume that the written record of Darwin's life and work would be accurate and complete by now. Yet in 1990, well over 100 years after Darwin's death, large amounts of new material became available, including notebooks and personal letters that were not available for consideration by earlier biographers. Uncovering these new fragments of history means that more pieces of the puzzle can be set in place.

In rare and bizarre instances, the data of history may be stolen and not recovered, if at all, for many years. In 1641, an Italian mathematician stole more than 70 letters written by the French philosopher Rene Descartes (Chapter 2). One of the letters was discovered in 2010 in a collection housed at a college in the United States. It was subsequently returned to France (Smith, 2010).

Altered and Hidden History

Other data may be hidden deliberately or altered to protect the reputation of the people involved. Sigmund Freud's first biographer, Ernest Jones, intentionally minimized Freud's use of cocaine, commenting in a letter, "I'm afraid that Freud took more cocaine than he should, though I'm not mentioning that [in my biography]" (Isbister, 1985, p. 35). We will see when we discuss Freud (Chapter 13) that recently uncovered data confirm Freud's cocaine use for a longer period than Jones was willing to admit in print.

When the correspondence of the psychoanalyst Carl Jung was published, the letters were selected and edited in such a way as to present a favorable impression of Jung and his work. In addition, it was revealed that Jung's so-called autobiography was written not by him but by a loyal assistant. Jung's words were "altered or deleted to conform to the image preferred by his family and disciples. . . . Unflattering material was, of course, left out" (Noll, 1997, p. xiii).

In a similar instance, a scholar who catalogued the papers of Wolfgang Köhler (Chapter 12), a founder of the school of thought known as Gestalt psychology, was perhaps too devoted an admirer. When he oversaw the selection of materials for publication, he restricted selected information to enhance Köhler's image. The papers had been "carefully

selected to present a favorable profile of Köhler.” A later historian reviewing the papers confirmed the basic problem with the data of history, “namely, the difficulty of determining the extent to which a set of papers is a true representation of a person or a slanted one, either favorable or unfavorable, biased by the person who selected the papers to be made public” (Ley, 1990, p. 197).

The data of history may also be affected by the actions of the participants themselves in recounting pivotal events. People may, consciously or unconsciously, produce biased accounts to protect themselves or enhance their public image. For example, Freud liked to depict himself as a martyr to his psychoanalytic cause, a visionary who was scorned, rejected, and vilified by the medical and psychiatric establishment of the day. Freud's first biographer, Ernest Jones, reinforced those claims in his books (Jones, 1953, 1955, 1957).

Date uncovered later revealed a totally different situation. Freud's work had not been ignored during his lifetime. By the time Freud was middle-aged, his ideas were exerting an immense influence on the younger generation of intellectuals. His clinical practice was thriving, and he could be described as a celebrity. Freud himself had clouded the record. The false impression he fostered was perpetuated by several biographers, and for decades our understanding of Freud's influence during his lifetime was inaccurate.

These instances illustrate the difficulties faced by scholars in assessing the worth of historical materials. Are the documents or other data fragments accurate representations of the person's life and work, or have they been chosen to foster a certain impression, whether positive, negative, or something in between? Another biographer stated the problem in this way: “The more I study human character, the more convinced I become that all records, all reminiscences, are to a greater or lesser degree based on illusions. Whether the distorting lens is that of bias, vanity, sentimentality, or simple inaccuracy, there is no Absolute Truth” (Morris, quoted in Adelman, 1996, p. 28).

Freud put the matter even more bluntly: “Anyone who writes a biography is committed to lies, concealments, hypocrisy, flattering and even to hiding his own lack of understanding, for biographical truth does not exist” (quoted in Cohen, 2012, p. 7).

In another example of hidden or suppressed data fragments, in the more than 70 years since Freud's death in 1939, many of his papers and letters have been published or released to scholars. In 2011, the first volume of Freud's 1,500 letters to the woman he would marry was finally published. They had been kept secret for all those years (Bollack, 2011). A huge collection consisting of 153 boxes of Freud's papers is held by the Library of Congress in Washington, DC. Some of these documents will not be made available for many more years at the request of the Freud estate. The formal reason for this restriction is to protect the privacy of Freud's patients and their families, and perhaps also the reputation of Freud and his family.

One letter to Freud from his eldest son is sealed until 2032. Correspondence with his nephew is being held until 2050. A letter from one of Freud's mentors will not be released until 2102, some 177 years after the man's death, leaving us to wonder what could be so remarkable about that letter as to require such secrecy for such a long period of time. Some collections, including letters to his daughter, Anna, and his sister-in-law, are held in perpetuity, meaning there is no release date for them at all. Psychologists do not know how these archival documents and manuscripts will affect our understanding of Freud and his work. Until these data fragments are available for study, however, our knowledge of one of psychology's pivotal figures remains incomplete and perhaps inaccurate.

Changing the Words of History: Distortion in Translation

Another problem with the data of history relates to information that comes to the historian through faulty translation from one language to another. We refer to Freud again for

examples of the misleading impact of translations. Not many psychologists are sufficiently fluent in the German language to read Freud's original work. Most people rely on a translator's choice of the most appropriate words and phrases, but the translation does not always convey the original author's intent.

Three fundamental concepts in Freud's theory of personality are *id*, *ego*, and *superego*, terms with which you are already familiar. However, these words do not represent Freud's ideas precisely. These words are the Latin equivalents of Freud's German words: *id* for *Es* (which literally translates as "it"), *ego* for *Ich* ("I"), and *superego* for *Uber-Ich* ("above-I").

Freud wanted to describe something intimate and personal with his use of *Ich* (I) and to distinguish it from *Es* (it), the latter being something distinct from or foreign to "I." The translator's use of the words *ego* and *id* instead of *I* and *it* turned these personal concepts into "cold technical terms, which arouse no personal associations" (Bettelheim, 1982, p. 53). Thus, the distinction between I and it (*ego* and *id*) is not as forceful for us as Freud intended.

Consider Freud's term *free association*. Here the word *association* implies a connection between one idea or thought and another, as though each one acts as a stimulus to elicit the next one in a chain. This is not what Freud proposed. His term in German was *Einfall*, which does not mean association. Literally, it means an intrusion or an invasion. Freud's idea was not to describe a simple linking of ideas but rather to denote something from the unconscious mind that is uncontrollably intruding into or invading conscious thought. Thus, our historical data, Freud's own words, were misinterpreted in the act of translation. An Italian proverb, *Traditore—Traduttore* (to translate is to betray), makes this point clearly.

What do these problems with the data of history tell us about our study of the history of psychology? They show primarily that our understanding of history is dynamic. The story is constantly changing and growing and is refined, enhanced, and corrected whenever new data are revealed or reinterpreted. Therefore, history cannot be considered finished or complete. It is always in progress, a story without an ending. The historian's narrative may only approximate or approach the truth, but it does so more fully with each new finding or new analysis of the data fragments of history.

In Context: Forces That Shaped Psychology

A science such as psychology does not develop in a vacuum, subject only to internal influences. Because it is part of the larger culture, psychology is affected by external or contextual forces that shape its nature and direction. The study of psychology's history must consider the context in which the discipline evolved, the prevailing ideas in the science and culture of the day—the **Zeitgeist** or intellectual climate or spirit of the times—as well as current social, economic, and political forces.

We see instances throughout this book of how these contextual forces influenced psychology's past and continue to shape its present and future. They even influence how we define and treat mental disorders (Clegg, 2012). Let us consider a few examples of contextual forces, including jobs, wars, and prejudice and discrimination.

Jobs

The early years of the twentieth century saw dramatic changes in the nature of psychology in the United States and in the type of work that psychologists were doing, as we shall see later. Largely because of economic forces, increasing opportunities emerged for psychologists to apply their knowledge and techniques to solve real-world problems. The primary explanation for this situation was practical. As one psychologist said, "I became an applied psychologist in order to earn a living" (H. Hollingworth, quoted in O'Donnell, 1985, p. 225).

Zeitgeist: The intellectual and cultural climate or spirit of the times.

Toward the end of the nineteenth century, the number of psychology laboratories in the United States was rising steadily, but so was the number of psychologists competing for jobs. By 1900, there were three times as many psychologists with doctoral degrees as there were labs to employ them. Fortunately, the number of teaching jobs was increasing as states throughout the Midwest and the West established universities. At most of them, however, psychology, as the newest science, received the smallest amount of financial support. Compared to more established departments such as physics and chemistry, psychology consistently ranked low in annual appropriations. There was little money for research projects, laboratory equipment, and faculty salaries.

Psychologists quickly realized that if their academic departments, budgets, and incomes were ever to improve, they would have to demonstrate to college administrators and state legislators that psychology could be useful in solving social, educational, and industrial problems in the real world. So, in time, psychology departments came to be judged on the basis of their practical worth.

At the same time, because of social changes in the U.S. population, psychologists were presented with an exciting opportunity to apply their skills. The influx of immigrants, along with their high birth rate, made public education a growth industry. Public school enrollments increased 700 percent between 1890 and 1918, and high schools were being built at the rate of one a day. More money was being spent on education than on defense and welfare programs combined.

Many psychologists took advantage of this situation and pursued ways to apply their knowledge and research methods to education. This marked a fundamental shift of emphasis in American psychology, from experimentation in the academic laboratory to the application of psychology to the issues of teaching and learning.

Wars

War is another contextual force that helped shape modern psychology by providing job opportunities for psychologists. We will see in Chapter 8 that the experiences of American psychologists in aiding the war effort in World Wars I and II accelerated the growth of applied psychology by extending its influence into such areas as personnel selection, psychological testing, clinical psychology, and engineering psychology. This work demonstrated to the psychological community at large, and to the public, how useful psychology could be.

World War II also altered the face and fate of European psychology, particularly in Germany (where experimental psychology began) and in Austria (the birthplace of psychoanalysis). Many prominent researchers and theorists fled the Nazi menace in the 1930s, and most of them settled in the United States. Their forced exile marked the final phase of psychology's relocation from Europe to the United States in the twentieth century.

War also had a personal impact on the ideas of several major theorists. It was after witnessing the carnage of World War I, for example, that Sigmund Freud proposed aggression as a significant motivating force for the human personality. Erich Fromm, a personality theorist and antiwar activist, attributed his interest in abnormal behavior to his exposure to the fanaticism that swept his native Germany during the war.

Prejudice and Discrimination

Another contextual factor is discrimination by race, religion, and gender. For many years, such prejudice influenced basic issues such as who could become a psychologist and where he or she could find employment.